

**Form PTO-1449** (modified)

List of Patents and Publications  
For Applicant's Information  
Disclosure Statement

(Use several sheets if necessary)

ATTY. DOCKET NO: 5707-04400

SERIAL NO: 10/784,837

APPLICANT: Marando et al.

FILING DATE: February 23, 2004

GROUP: 3746

**U.S. PATENT DOCUMENTS**

EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
CJ	A1	4,722,669	02/02/1988	Kundert			
	A2	4,727,468	02/23/1988	Maekawa			
	A3	5,249,741	10/05/1993	Bistline et al.			
	A4	5,307,439	04/26/1994	Enami			
	A5	5,687,079	11/11/1997	Bauer et al.			
	A6	5,727,928	03/17/1998	Brown			
	A7	5,825,972	10/20/1998	Brown			
	A8	5,942,866	08/24/1999	Hsieh			
	A9	5,962,933	10/05/1999	Henderson et al.			
	A10	5,990,582	11/23/1999	Henderson et al			
	A11	6,182,902	02/06/2001	Shih			
	A12	6,188,189	02/13/2001	Blake			
	A13	6,208,538	03/27/2001	Halamik et al.			
	A14	6,226,324	05/01/2001	Allstrom			
	A15	6,247,898	06/19/2001	Henderson et al			
	A16	6,262,549	07/17/2001	Yang et al.			
	A17	6,519,167	02/11/2003	Nguyen			
	A18	6,528,987	03/04/2003	Blake et al.			
	A19	6,563,284	05/13/2003	Teutsch et al.			
	A20	6,601,168	07/29/2003	Stancil et al.			
	A21	6,650,074	11/18/2003	Vyssotski et al.			
	A22	6,661,679	12/09/2003	Yang et al.			

<b>Form PTO-1449</b> (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use general sheets if necessary)		ATTY. DOCKET NO: 5707-04400		SERIAL NO: 10/784,837			
		APPLICANT: Marando et al.					
		FILING DATE: February 23, 2004		GROUP: 3746			
U.S. PATENT DOCUMENTS							
EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
CJ	A23	US 2003/0193307 A1	10/16/2003	Burstein			
CJ	A24	US 2004/0001542 A1	01/01/2004	Miller, Jr.			

  

FOREIGN PATENT DOCUMENTS							
EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO

  

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
CJ	A25 Marando et al., U.S. Patent Application No. 10/459,169 entitled "Programmable PWM Stretching for Tachometer Measurement", filed on June 11, 2003.
↓	A26 Analog Devices, Publication ADM1027, "dBCOOL™ Remote Thermal Controller and Voltage Monitor," 2003, 56 pages.
↓	A27 National Semiconductor Corporation, Publication LM63, "±1°C Accurate Remote Diode Digital Temperature Sensor with Integrated Fan Control," February 2003, 28 pages.
↓	A28 Stephen Ohr, "Analog IC vendors find 'Intel Inside' a safe bet," September 12, 2002, online at <a href="http://www.eetimes.com/story/OEG20020912S0026">http://www.eetimes.com/story/OEG20020912S0026</a> .

  

EXAMINER: CJ	DATE CONSIDERED: 6/27/07
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.



ITW

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/784,837  
Filed: February 23, 2004  
Inventor(s):  
Eileen M. Marando and Robert  
W. Schoepflin

Title: MAPPING A PLURALITY  
OF SENSORS TO  
RESPECTIVE ZONES IN A  
FAN CONTROL SYSTEM

§ Examiner: Unknown  
§ Group/Art Unit: 3746  
§ Atty. Dkt. No: 5707-04400  
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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Jeffrey C. Hood

*Jeffrey C. Hood*

Signature

2/3/2006

Date

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CS  
6/27/07

Sir:

Applicant requests consideration of ☐ the references listed on the attached Form PTO-1449 and/or ☒ the additional information identified below in paragraph 5.

1. This Information Disclosure Statement is submitted:

- a. ☐ within 3 months of the filing date of a national application other than a continued prosecution application under § 1.53(d);  
☐ within 3 months of the date of entry of the national stage as set forth in § 1.491 in an International application;  
☒ before the mailing date of a first Office Action on the merits; or  
☐ before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114.

- b. ☐ after the events of above paragraph 1a and prior to the mailing date of a final Office Action or Notice of Allowance, and thus: ☐ the certification of paragraph 2 below is provided, or ☐ a fee of \$180.00 is enclosed below.
- c. ☐ after the mailing date of a final Office Action or a Notice of Allowance and prior to payment of the issue fee, and thus: the certification of paragraph 2 below is provided and a fee of \$180.00 is enclosed below.

2. It is hereby certified:

- ☐ that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
- ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in § 1.56 (c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following additional information (including any co-pending or abandoned U.S. applications, prior uses and/or sales, etc.) is requested:

4. For each non-English language reference listed on the attached Form PTO-1449:

- ☐ reference is made to an English language translation submitted herewith, and/or
- ☐ reference is made to a foreign patent office search report (in the English language) submitted herewith, and/or
- ☐ reference is made to an English language translation of a foreign patent office search report submitted herewith, and/or
- ☐ reference is made to the concise explanation contained in the specification of the present application at page(s) \_\_\_\_\_, and/or
- ☐ reference is made to the concise explanation set forth below:

5. ☒ Applicant also offers the following comments for the Examiner's consideration:

**Applicant is aware that, prior to the filing date of the present application, a specification was proposed for a fan controller that monitored thermal zones, fan speeds and voltages. Overall, the specification described the functionality of an integrated, hardware-based fan control and fan monitoring system that supported the following features:**

- Internal Ambient Temperature sensing
- Monitoring of two remote thermal diodes
- Five Voltage Identification Inputs
- Five Voltage Supply Monitors

- SMBus 2.0 compliant interface
- XOR Tree Test Mode
- PWM fan control and tachometer monitoring
  - \* Monitor four fans controlled by three PWM outputs
  - \* Programmable automatic fan control based on temperature.

The specification further described an autofan control algorithm to control three PWM outputs based on three temperature zones, and proposed fan control and fan monitoring systems that included registers corresponding to each implemented function, with each register configurable by a host computer BIOS. These registers could be programmed and updated as part of the autofan control algorithm, allowing the monitoring of temperatures in three different zones and the monitoring of four different tachometer signals. These registers could also be used for setting fan control voltage limits, temperature limits, and three separate hysteresis values.

6. ☐ Also enclosed is a copy of a foreign search report citing these references.
7. ☐ The listed documents were brought to the attention of the Applicant(s) after payment of the issue fee in the captioned case. The documents were cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. Applicant(s) request this Information Disclosure Statement and attached Form PTO-1449 be placed in the file of the captioned application.
8. ☐ Applicant(s) requests that the Information Disclosure Statement and attached Form PTO-1449 and references, which are being filed before the grant of the patent and pursuant to 37 C.F.R. § 1.97(i), be placed in the file of the captioned application.

Applicant does not believe that any fees are required relating to this Information Disclosure Statement. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel PC, Deposit Account No. 50-1505/5707-04400/JCH.

Respectfully submitted,



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Date: 2/3/2006